



California Public Utilities Commission

Division of Water and Audits

Financial & Management Audit of the Energy Efficiency Public Programs of Pacific Gas and Electric Company

U-39-E

**For the Year Ended
December 31, 2007**

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October 1, 2008

Public Utilities Commission

Financial & Management Audit
of the
Energy Efficiency Public Programs
of
Pacific Gas and Electric Company



Report
to the
Public Utilities Commission
on the
Financial & Management Audit
of the
Energy Efficiency Public Programs
of
Pacific Gas and Electric Company

December 1997

**Financial and Management Audit
Energy Efficiency Programs
Pacific Gas and Electric Company
For the Year Ended December 31, 2007**

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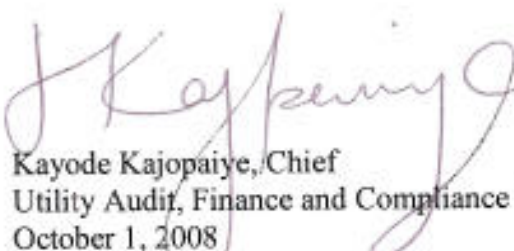
Commission Staff Independent Audit Opinion

Pursuant to Commission Decision (D.) 05-01-055, 05-09-043 and 05-11-011, the Utility Audit, Finance and Compliance Branch (UAFCB), of the Commission's Division of Water and Audits, performed a financial and management audit of the energy efficiency programs administered by Pacific Gas & Electric Company (PG&E). PG&E's management is responsible for compliance with the requirements of the aforementioned Commission Decisions.

The responsibility of the UAFCB is to express an opinion on PG&E's compliance with the aforementioned regulations based on its examination of PG&E's records. The UAFCB's examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence concerning PG&E's compliance with the requirements noted above and performing such other procedures as we considered necessary in the circumstances. The UAFCB believes that its examination provides a reasonable basis for an opinion. The examination does not provide a legal determination on PG&E's compliance with specified requirements.

In the opinion of the UAFCB, PG&E complied, in all material respects, with the aforementioned requirements for the year ended December 31, 2007.

This report is intended solely for the information and use of the California Public Utilities Commission and the company being examined, and is not intended to be and should not be used by anyone other than the specified parties.


Kayode Kajopaiye, Chief
Utility Audit, Finance and Compliance Branch
October 1, 2008

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Energy Efficiency Programs
Pacific Gas and Electric Company
For the Year Ended December 31, 2007**

Financial and Management Audit
Energy Efficiency Programs
Pacific Gas and Electric Company
For the Year Ended December 31, 2007

I. Executive Summary¹

This report presents the results of the Utility Audit, Finance and Compliance Branch's (UAFCB's) audit of Pacific Gas and Electric Company's (PG&E) Energy Efficiency Programs for calendar year 2007.² The UAFCB was given authority to conduct this audit in Commission Decision (D.) 05-11-011, Ordering Paragraphs (OP) 1 and the Administrative Law Judge's (ALJ) Ruling, dated February 21, 2006, Ruling Paragraph 5.

The objectives of UAFCB's audit were to (1) assess PG&E's accounting system and procedures related to the energy efficiency programs and determine if expenditures were properly recorded and reported to the Commission, (2) determine PG&E's compliance with Commission directives and internal policies for customer enrollment, energy education, installation costs and measures, inspections, (3) assess PG&E's effectiveness in implementing its energy efficiency programs and ascertain that PG&E had adequate processes in place between itself and its contractors, (4) ascertain that PG&E's internal control and management oversight within the energy efficiency programs were properly in place and executed, and (5) reviewed actions taken by PG&E on prior audit recommendations and findings.

The UAFCB analyzed and reviewed documents provided by PG&E, randomly sampled selected project files for supporting documentation of eligibility, for evidence of measure installations, inspections and cost data. The UAFCB also conducted reviews of post-inspection reports, had several correspondence and interviews with PG&E management, and performed such other procedures as deemed necessary in the circumstances.

For 2007, PG&E had an authorized budget of \$279 million, to administer and implement the energy efficiency programs, including those conducted in partnership with other entities and those performed under contract with third-parties.³ PG&E spent \$298 million in 2007 or 107% of its budget. In 2006, PG&E had an authorized budget of \$245 million and only spent \$142 million, or 58% of its authorized budget. In total, PG&E spent \$440 million on the energy efficiency programs for 2006 and 2007, or 84% of the total authorized budget of \$524 for the two-year period.⁴

¹ Appendix A describes the abbreviations and acronyms used in this decision.

² The energy utilities also offer a special energy efficiency program to their income-qualified low-income customers through a program referred to as the Low Income Energy Efficiency Program (LIEE). The UAFCB uses the term energy efficiency programs throughout this report to refer exclusively to non-LIEE energy efficiency services.

³ These budgets and amounts expended do not include amounts for the evaluation, measurement and verification process.

⁴ In D. 05-09-043, the Commission, among other things, adopted fund shifting guidelines that allow the utilities the flexibility to carry over or carry forward funds from one program year to the next.

The UAFCB concludes that PG&E sufficiently implemented its 2007 energy efficiency programs and complied, in material respects with Commission's directives.

II. Summary of Audit Recommendations

1. PG&E should take steps to ensure that all timesheets used in the assignment of direct overheads charged to the energy efficiency programs have proper supervisor approval.
2. PG&E should take steps to ensure that the proper energy savings information be recorded in any instance where the financial incentive paid is not based on actual approved energy savings for that measure or program.

III. Background

The development of energy efficiency programs in California has evolved over many years. In the early 1970's, the Oil Embargo of 1973 and the Organization of the Petroleum Exporting Countries (OPEC) control of the petroleum market brought about long lines at the gas pump and eventually abrupt rises in electricity prices. These price increases concerned consumers in California who had grown used to low energy bills and decades of falling electricity prices. In response to consumer concerns regarding high electric bills in California, the Commission ordered California's investor owned utilities or IOUs to begin offering energy efficiency programs.

Early energy efficiency programs primarily focused on providing residential customers with energy efficiency options to reduce their bills. These early programs, known as conservation programs, offered suggestions to customers such as turning off lights in unoccupied rooms and turning down the thermostat.

By the early 1980s, energy conservation programs were starting to be replaced by a new concept termed demand-side management programs. This term, coined by the Electric Power Research Institute in mid-1983, was used to describe efforts by the IOUs to encourage consumers to modify their level and pattern of electricity usage by the use of energy efficiency products, services and practices.

Under the demand-side management, the utilities could both reduce and build load, depending on their demand-side management program and performance goals. In California, the IOUs used four different types of demand-side management programs: (1) energy efficiency programs; (2) load management programs; (3) fuel substitution programs; and (4) load building programs.

In the mid-1980s, oil and gas prices fell significantly. In addition, efforts to develop demand-side alternatives languished significantly in California, in large part because of excess generating capacity in the state. Subsequently, utilities and consumers were no longer as concerned about energy conservation and/or energy efficiency programs.

In the early 1990s, the Commission, in collaboration with other government agencies, the IOUs, and public interest groups, joined together to consider ways to revitalize the demand-side management and promote energy efficiency in California again. This group, termed the California Collaborative, developed an incentive structure that paid the utilities for every measured British Thermal Unit (BTU) or kilowatt hour saved. As a result, the utilities found energy efficiency programs profitable and initiated energy efficiency programs statewide. Under this structure, the IOUs were responsible for the administration and implementation of energy efficiency programs, subject to Commission oversight.

In the mid-1990s, with the restructuring of the electric energy industry due to deregulation, the Commission determined that the administration of ratepayer-funded energy efficiency programs also needed to be restructured. In its restructuring, the Commission pursued a structure for energy efficiency programs that included: (1) administration of the programs by an independent, non-profit organization and (2) working towards achieving market transformation. Market transformation was intended to reduce or eliminate the need for ratepayer-funded subsidies of energy efficiency programs. The Commission's goal for market transformation was to privatize the provision of cost-effective energy-efficient products and services so that customers would seek and obtain these products and services in the private, competitive market. The Commission anticipated that public funding would be needed only for a short time period while causing the market to be transformed.

In D.97-02-014, the Commission created an advisory board called the California Board of Energy Efficiency (CBEE), to help with the transition from utility administration of energy efficiency programs to independent administration and to advise the Commission on setting energy efficiency policy guidelines.

Following the creation of the CBEE in 1997, the Commission continued the IOU's administration and implementation responsibilities on an interim basis. The Commission directed the CBEE to develop and submit a Request for Proposal (RFP) entailing policy and program guidelines for a newly restructured independent administration of energy efficiency programs. In D.98-07-036, the Commission authorized the RFP submitted by the CBEE, but then encountered numerous obstacles while trying to implement the RFP.

First, the California State Employees Association (CSEA) asserted that work performed by contractors hired by the CBEE violated requirements that state agencies use civil servants for completing tasks traditionally performed by the state. Then, while the CSEA challenge was pending, the California Attorney General's office raised additional legal issues regarding the Commission's authority to create and use the CBEE.

The Commission, recognizing its plan for independent administration of energy efficiency programs faced insurmountable obstacles, cancelled the RFP in D.99-03-056 and extended interim utility administration of the energy efficiency programs through December 31, 2001. Throughout this time frame, the Commission continued to focus on

restructuring energy efficiency, especially by working towards achieving market transformation, which would effectuate energy efficiency through the independent actions of individual customers and suppliers.

In D.00-02-045, the Commission determined that the policy changes to effectuate market transformation had been incorporated into the energy efficiency programs. The Commission found that CBEE had essentially fulfilled its role and that CBEE's legal structure was cumbersome. Consequently, in this decision, the Commission abolished CBEE. At this time, the Commission also determined that there was a continuing need for substantial regulatory oversight.

In the summer of 2000, the state began to face huge energy price hikes and supply shortages that marked the beginning of California's energy crisis. This energy crisis prompted the Commission to revise its policy of promoting market transformation in favor of reducing energy consumption and achieving energy load reductions. Often referred to as the Summer 2000 Energy Efficiency Initiative (Summer Initiative), the Commission, in D.00-07-017, requested the IOUs to submit proposals that would bring about large reductions in electric demand and usage in the shortest amount of time.⁵ The Commission ordered that the utility program proposals be ready to implement by September 1, 2000. In a joint Assigned Commissioners and Administrative Law Judge's (ALJ) Ruling, dated August 21, 2000, the Commission ordered the IOUs to implement their energy efficiency program proposals, designed to provide maximum energy and demand reduction.

The Commission's adoption of the Summer Initiative marked the beginning of a new administrative structure for energy efficiency programs. The Commission's Energy Division was assigned the responsibility of reviewing program applications and making recommendations on energy efficiency program selections for each funding cycle, for approval by the Administrative Law Judge (ALJ). In addition, the Energy Division, with the ALJ delegated authority to approve some of these functions, had oversight over program plans, budgets, expenditures, and portfolio management. The Energy Division also had the responsibility of reviewing plans to evaluate, measure, and verify (EM&V) energy efficiency program performance, with ultimate approval authority delegated to the ALJ.⁶

On August 23, 2001, the Commission opened an Order Instituting Rulemaking (OIR or R.) 01-08-028 to examine the future of energy efficiency policies, administration, and programs. In R.01-08-028, the Commission identified a set of principles that would be used in developing criteria for energy efficiency programs in 2002 and beyond. Based on the principles identified in the OIR, the Commission established the Energy Efficiency Policy Manual, which was adopted in D.01-11-066, on November 29, 2001. This policy

⁵ See D.00-07-017, page 204 and Ordering Paragraph 86

⁶ EM&V is a formal process to review energy efficiency program achievements with Commission authorized protocols, which are updated before each program cycle.

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manual established, among other things, new policy rules and criteria covering the following topics:

- 1) Program goals and objectives;
- 2) Program design guidelines and eligibility;
- 3) Standard definitions;
- 4) Cost-effectiveness rules and definitions;
- 5) Budgets and compensation;
- 6) EM&V requirements; and
- 7) Structure of the Commission's review process.

In D.01-11-066, the Commission also adopted new rules for the energy efficiency programs that allowed non-utilities to compete with the utilities for the energy efficiency funding.

In May 2003, the Commission, in collaboration with the California Energy Commission (CEC) and the California Consumer Power and Conservation Financing Authority (CPA), released their Energy Action Plan (EAP), which identified cost-effective energy efficiency as the resource of first choice of six critical components for reducing energy use per capita in California.⁷ The other five components for reducing per capita energy use included:

- 1) Ensuring reliable, affordable, and high quality power supply for customers in all regions in the state by building sufficient new generation;
- 2) Accelerating the state's goals for renewable resource generation to 2010;
- 3) Upgrading and expanding the electricity transmission and distribution infrastructure and reduce the time before needed facilities are brought on-line;
- 4) Promoting customer and utility owned distributed generation; and
- 5) Ensuring a reliable supply of reasonably priced natural gas.

In August 2003, the Commission issued D.03-08-067, where it ordered the solicitation of energy efficiency proposals from the utilities and non-utility parties for 2004 and 2005. In this decision, the Commission continued to address policy and program process changes for the ratepayer-funded energy efficiency programs. Among the items addressed in this decision, the Commission:

- 1) Allocated PGC funding to include statewide utility programs, programs proposed by non-utilities, and 10% to statewide marketing, outreach and EM&V;
- 2) Awarded funding to entities and programs that were likely to fulfill energy savings goals and meet public policy and EM&V goals;

⁷ A copy of the Energy Action Plan is available on the Commission's website at <http://docs.cpuc.ca.gov/published/Report/28715.htm>.

- 3) Allowed utilities to submit proposals to continue administering their current programs as long as they satisfied the Commission's criteria; and
- 4) Modified program selection criteria for 2004-05 to include cost-effective, long-term energy savings.

In D.03-12-060, the Commission approved statewide and local energy efficiency programs for a two-year period, 2004-05.

In D.04-09-060, the Commission continued to reflect on the critical importance of reducing energy use per capita in California by establishing numerical savings goals for electricity and natural gas savings for the four IOUs. In order to meet the electric and natural gas savings goals, the Commission authorized a three-year program implementation and funding cycle and directed the IOUs to develop energy efficiency plans and funding levels for the 2006-2008 program cycle.

By D.05-01-055, the Commission further clarified its expectations regarding the development of the 2006-2008 energy efficiency plans and adopted an administrative structure for the energy efficiency programs funded by ratepayer dollars. In this decision, the Commission reassigned the lead administrative role in energy efficiency program selection and portfolio management to the IOUs. As energy efficiency program selectors, the IOU's responsibilities include selecting activities and implementers and allocating ratepayer dollars to those activities. As portfolio managers, the IOU's responsibilities include reviewing and approving program implementation plans, overseeing contracts with implementers, tracking the costs and performance of the programs selected, identifying and making improvements to programs design and implementation, reviewing and approving invoices from implementers, and generating required reports to regulators. To ensure that program results are accurate and that ratepayer funds are spent and managed in a responsible manner, the Commission pointed out that it maintains a policy oversight role and holds the final decision-making authority.

In D.05-01-055, the Commission also established an advisory group structure, competitive bidding requirements and a ban on affiliate transactions to ensure that the program selection process would not favor programs designed and implemented by the IOUs over those designed and implemented by third-parties. In addition, the Commission established the administrative structure for the EM&V of this cycle's energy efficiency program performance. For EM&V, the Commission assigned its Energy Division the management and contracting responsibilities for all EM&V studies for the purposes of: (1) measuring and verifying energy and peak load savings; (2) generating data from savings estimates and cost-effectiveness inputs; and (3) evaluating whether programs goals are being met. In addition, the Commission's Energy Division was assigned the task of performing research and developing recommendations to assist in the development of energy efficiency policy goals and priorities, evaluating remaining potential to achieve additional energy or peak savings, and other research activities needed to support the Commission's policy oversight.

In April 2005, following the establishment of energy efficiency goals and the development of the administrative framework for guiding energy efficiency programs funded by the ratepayers of California's four largest IOUs, the Commission, in D.05-04-051, provided guidance for the development of energy efficiency program portfolios for 2006 and beyond. In D.05-04-051, the Commission also ordered updates to the Commission-adopted Energy Efficiency Policy Manual.

Among the updated policy rules, the Commission described the threshold requirements for cost-effectiveness of energy efficiency programs, described how to calculate and present cost-effectiveness results, described its expectations regarding the information that the IOUs will file with their applications, described the process for updating the Energy Efficiency Policy Manual in the future, provided a guide to reference documents and included a list of common terms and definitions.

In addition, the Commission, in D.05-04-051, directed the IOUs to submit their applications for the 2006-2008 program cycle, by June 1, 2005. The Commission described its expectations regarding the information that the IOUs would file with their applications. The Commission also directed them to include in their applications a placeholder funding level equal to 8% of the program funding for EM&V.

On June 1, 2005, the IOU filed their applications with their energy efficiency plans and proposed funding levels for the 2006-2008 program cycle, as required in D.05-04-051. Shortly after the filing of the applications, a prehearing conference (PHC) was held at the Commission in San Francisco on June 22, 2005, which led to the issuance of an Assigned Commissioner's Ruling and Scoping Memo on June 30, 2005. In the scoping memo, the Commissioner determined that the proceedings addressing issues related to the 2006-2008 energy efficiency plans and funding levels and the activities pertaining to EM&V plans for 2006-2008 energy efficiency activities be bifurcated into separate phases.

On September 22, 2005, in Phase 1 of the 2006-2008 program cycle, following the filing of comments from interested parties and requests for interim authorizations from the IOUs, the Commission issued D.05-09-043. In this decision, the Commission, among other things, determined that the IOU's 2006-2008 energy efficiency plans and funding levels for non-EM&V activities met the Commission's threshold requirements for cost-effectiveness per the policy rules set forth in Energy Efficiency Policy Rules adopted by the Commission in D.05-04-051. In D.05-09-043, the Commission also addressed, among other things, evaluation criteria for the competitive bidding process, authorized the IOUs to expend 2006 monies to fund activities in 2005 that have a long start-up period, adopted fund shifting rules and approved the 2006-2008 program budgets for PG&E, SDG&E, SCE and SCG.

In October, 2005, the Commission and the CEC jointly released the Energy Action Plan II (EAP II).⁸ The EAP II described a coordinated implementation plan for state energy policies by expanding the scope of the original EAP. Among the actions incorporated in the EAP II, the Commission and the CEC:

- 1) Identified the fuels used in the transportation of California's goods and population as a third energy sector;
- 2) Further described research, development and demonstration activities that are critical in realizing energy goals;
- 3) Described the priority sequence for actions addressing increasing energy needs; and
- 4) Identified measures to increase outreach to consumers by providing improved education and services regarding energy efficiency, demand response, rates, climate change, and opportunities to reduce the environmental impacts of energy use.

On November 18, 2005, the Commission issued D.05-11-011, its Phase 2 decision for the 2006-2008 program cycle. In D.05-11-011, the Commission, among other things, approved a Joint Staff Request for EM&V Budget Authorization and EM&V Fund Shifting Authority, submitted by staff from the Commission and the CEC.⁹ That submittal, adopted by the Commission, included provisions and a budget for Energy Division to carry out its EM&V studies.¹⁰

Shareholder Incentives

In the late 1980s, the Commission realized that utilities were facing a financial conflict when promoting energy efficiency and conservation. Through the rate of return mechanism, utilities earned an incentive for building additional capacity. Consequently, the IOUs were more inclined to strive to increase load in order to build additional capacity. To address this conflict, the Commission provided the IOUs with an opportunity to earn on cost-effective energy efficiency measures.

Initially, the Commission offered an experimental incentive.¹¹ This incentive shared savings between ratepayers and shareholders, but the mechanism varied among the utilities. Under the shared savings mechanism, the utilities had the opportunity to earn a fixed percentage of the net savings to ratepayers (energy savings minus costs) after a threshold level of savings was achieved. However, these initial mechanisms did not require that the forecasted per unit savings be adjusted based on the results of the

⁸ A copy of the Energy Action Plan II is available on the Commission's website at <http://www.cpuc.ca.gov/published/report/.htm.51604.htm>.

⁹ See D.05-11-011, Ordering Paragraph 1 and Attachment 3 of that decision.

¹⁰ Ibid., Attachment 3.

¹¹ The focus of this section is on the shared-savings mechanisms for energy efficiency programs, rather than the "management fee" incentive mechanism for LIEE.

program's implementation. Measurement studies of post-installation savings were conducted only to refine or update savings estimates on a prospective basis.

The potential for utility profits under these earlier mechanisms was much lower than the shared savings mechanism adopted for later program years. However, under these earlier mechanisms, the utilities received their incentive payments in the first year after providing the energy efficiency programs and the utilities were not subject to financial penalties if the programs did not prove to be cost-effective.

The Commission continued to find that these incentives contributed to the utilities' revitalized interest in promoting energy efficiency, for least-cost energy resource planning and procurement. The Commission determined that offering energy efficiency shareholder incentives yielded significant benefits to all ratepayers. However, the Commission was interested in refining the mechanism to account for the degradation of some measures and for the fact that some measures did not remain working or installed for as long as originally intended.

In D.93-05-063, the Commission established EM&V protocols for measuring per unit load savings after program installation for both the first and subsequent years (ex post review). These protocols required the utilities to conduct one degradation study up to four years after implementation and two retention studies up to nine years after implementation. Consequently, under the new protocols, savings were paid out over a ten-year period, over four installments, for any one program year.

The Commission established the Annual Earnings Assessment Proceeding (AEAP) as the forum for evaluating the utilities' earnings claims for energy efficiency and LIEE programs, commencing in 1994. Subsequently, the Commission continued to focus on a shared-savings mechanism with an ex post review and made refinements to the mechanism.

In D.94-10-059, the Commission adopted, among other things, refinements to the mechanism that shared savings for program years 1995 through 1997, with a savings rate of 30% for shareholders. In addition, in this decision, the Commission, among other things, standardized the process across utilities, allowed the utilities to increase earnings only if they increased the net benefits (savings less costs) to ratepayers and required the utilities to share in the risks associated with achieving cost-effectiveness of the programs.

In D.97-02-014, the Commission found that although shareholder incentives were designed to offset disincentives, the utilities continued to face significant disincentives to promoting energy efficiency in the competitive energy environment brought about by, among other things, Assembly Bill (AB) 1890.¹² However, in recognition of the Commission's plans to work towards energy efficiency market transformation and to transition energy efficiency to independent administration, the Commission, in D.97-12-

¹² AB 1890, the Electric Utility Industry Restructuring Act, became law on September 23, 1996.

013, among other things, reduced the 30% shared-savings percentage for programs such as the direct rebate program and placed an overall cap on utility earnings.

In subsequent decisions, for program years 1999, 2000 and 2001, the Commission, among other things, decided to reduce the potential conflicts between the utilities role in the energy services market and their continued role as administrator for the energy efficiency programs. The Commission accomplished that by directing implementation activities away from the utilities towards other market participants. In addition, among other things, the Commission continued to refine the achievement milestones and overall funding caps.

In D.01-11-066, and confirmed by D. 02-03-056, the Commission discontinued shareholder incentives for energy efficiency programs altogether. Thus, while the Commission continued to process AEAP from previous years, beginning with the 2002 program year, all incentive payments for energy efficiency programs ceased.

In D.07-09-043, the Commission adopted a shareholder risk/reward incentive mechanism for post-2005 energy efficiency programs. The Commission designed this mechanism to provide both a meaningful level of shareholder earnings and an estimated return *of over 100%* on ratepayers' investment in energy efficiency. The Commission pointed out that the return of the investment will represent the substantial cost savings created by displacing more expensive supply-side alternatives with energy efficiency, which will result in lower utility revenue requirements and lower customer bills.

The Commission's adopted incentive mechanism protects ratepayers' financial investment, ensures that program savings are real and verified, and imposes penalties for substandard performance:

- The mechanism provides a meaningful opportunity to the utilities to earn for the shareholders.
- Earnings to shareholders only accrue when there are positive net benefits (savings minus costs) for ratepayers.
- Earnings only accrue as the utilities meet and surpass the Commission's savings goals.
- Earnings are greatest when savings performance is superior.
- There are no earnings or penalties within a deadband range of performance; i.e., greater than 65% and less than 85% of goal achievement.
- All net benefits and achievements are independently verified by the Commission's Energy Division.
- Ratepayers receive the vast majority of the economic benefits.
- Financial penalties are imposed for substandard performance in achieving savings goals.
- If portfolio costs exceed the verified savings, shareholders are obligated to pay ratepayers back for those negative net benefits.

- Both potential earnings and penalties are capped at \$450 million.

For the 2006-2008 program cycle, the Commission, in D.07-09-043, estimated that the total verified net benefits, if utilities achieve 100% of the savings goals, would be \$2.7 billion, with \$2.4 billion (88%) of those net benefits going to ratepayers and \$323 million (12%) going to shareholders.

The Commission, in D.07-09-043, established an earnings claim and recovery process, with two interim claims during each three-year cycle and one final true-up claim after the program cycle is completed. The Commission ordered a holdback of 30% of the estimated payouts for any interim payout of earnings. In addition, the Commission indicated that authorized earnings will be recovered in electric distribution and gas transportation rates, pursuant to D.98-03-063.

Lastly, in D.07-09-043, the Commission established a schedule for revisiting the adopted mechanism and directed the Energy Division to prepare an evaluation report for the Commission's consideration by February 1, 2011, in time for the Commission to consider any changes to the mechanism in time for the 2012-2014 program cycle.

In D.08-01-042, the Commission modified D.07-09-043, based on the utilities and parties' assertions that the adopted interim payment process could, under certain conditions, result in a utility losing all the earnings that had already been paid to it in the two interim payments. The utilities and parties argued that this potential refunding could cause certain problems with respect to the utilities' financial reporting and ultimately result in the utilities not being able to book the interim payments until the final adjustments have been determined. This uncertainty, the parties argued could result in a higher cost of financing and cause the utilities to not receive the full benefit of the shareholder incentives from the financial markets. Consequently, the Commission adopted changes to the true-up provisions. The Commission increased the holdback from 30% to 35% and clarified the source of load impact estimates that are used to calculate the interim incentives for the 2006-2008 program cycle.

Energy Efficiency Funding

In the past, the funding mechanism for the utilities' energy efficiency programs was provided out of utility rates. Typically, General Rate Cases (GRC) were performed every three years, with the first year's budget set at the beginning of each cycle. The utilities then submitted annual advice filings to the Commission each October to provide program and budget updates between GRC.

AB 1890, among other things, established Public Utilities (PU) Code Section 381, which, among other things, provides minimum funding provisions for electric public interest programs, including energy efficiency, and required funds to be collected from ratepayers

for these programs via a non-by-passable electric surcharge through December 31, 2001. In September 2000, AB 995 became law which, among other things, extended the mandated electric surcharge through January 1, 2012. Natural gas energy efficiency programs continued to be funded in rates.

In September 2000, AB 1002 became law, which among other things, added PU Code Section 890. PU Code Section 890 required the Commission to establish a surcharge on all natural gas consumed in California to fund certain low-income assistance programs, cost-effective energy efficiency and conservation activities, and public interest research and development.

In D.04-08-010, the Commission implemented PUC Section 890, establishing a natural gas surcharge to fund gas-related public purpose program (PPP). The natural gas surcharges are first directed to the State Board of Equalization (BOE), before being used to reimburse the utilities for natural gas program costs.

Every quarter, the utilities send three months of gas surcharge collections to the BOE, for deposit into the Gas Surcharge Fund. Soon thereafter, the utilities make a request to the Commission for reimbursement. Generally, within 30 days of the request, a refund is received by the utilities, less the amount for gas public interest research and development and BOE administrative fees. The utilities have not been receiving interest for the time the surcharge collections are in the Gas Surcharge Fund.

Consequently, energy efficiency programs, among others, are currently funded by ratepayers through the PPP rates on customers' electric bills and a surcharge on natural gas customers' bills.¹³ The PPP and gas surcharges collected from customers are allocated to individual program balancing accounts, based on rates set in the annual PPP and surcharge update filings.¹⁴

Energy Efficiency Budgets

PU Code Section 381, as established by AB 1890 in 1996, required, among other things, minimum yearly funding levels for energy efficiency for years 1998-2001. Those funding levels are shown in the table below. AB 995, chaptered in 2000, among other things, extended mandatory funding of energy efficiency programs through 2012.

Table 1
Yearly Electric Energy Efficiency Minimum Funding Levels Established by AB 1890

Year	Minimum Electric Budget Per Year			
	PG&E	SCE	SDG&E	Total
1998, 1999 & 2000	\$106,000,000	\$90,000,000	\$32,000,000	\$228,000,000
2001	\$106,000,000	\$50,000,000	\$32,000,000	\$188,000,000

¹³ Entities, listed in PUC Section 896, are exempt from paying the natural gas surcharge.

¹⁴ Some of the utilities may refer to certain components of the PPP as a public goods charge (PGC).

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For the year 2001, in D.01-01-060, the Commission authorized the IOUs a statewide funding level of \$321.8 million for energy efficiency, which included \$259.2 million in electric funds and \$62.6 million in gas funds. Of the \$259.2 million authorized for electric energy efficiency, the Commission granted \$188 million in 2001 PGC with the remaining \$71.2 million coming from a carry-over of previously unspent funds from 2000. The \$62.6 million for gas energy efficiency programs were authorized through rates set in the utilities' GRC.

Of the \$170.5 million proposed funding for statewide programs in 2002, the Commission, in D.01-11-066, set aside \$10 million for competitive solicitation by utilities and non-utilities. In D.01-11-066, the Commission also set aside \$100 million of energy efficiency funding available for 2002-03 local programs for non-IOUs and \$25 million for IOUs-funded local programs.

In D.02-03-056, the Commission selected the year 2002 statewide energy efficiency programs and authorized \$160 million in PGC funds for 2002. In this decision, the Commission approved funding for 16 statewide programs, in which fourteen were implemented by the IOUs and two by third parties.

In May 2002, in D.02-05-046, the Commission approved the spending of \$109.7 million of the \$125 million in total local program funding made available in D.01-11-066. In this decision, the Commission authorized the selection of local energy efficiency programs that totaled \$102 million in PGC funds. In addition, \$2.8 million was authorized for local programs that were already implemented in 2002. The remaining \$4.9 million in funding was allocated to cover administrative fees that the IOUs incurred while administering the contracts for third party local energy efficiency program.

In January 2003, to prevent any service disruption, the Commission issued D.03-01-038 which authorized the IOUs, whose programs were set to expire at the end of 2002, to continue implementing their energy efficiency programs through March 31, 2003, using PGC funds authorized for 2002 in D.02-03-056 and D.02-05-046.

In D.03-04-055, the Commission approved statewide and local energy efficiency programs for 2003. This decision authorized \$226 million for statewide energy efficiency programs and \$249.5 million in local programs, funded by PGC collections in 2003 and amounts carried over from previous years.

In D.03-12-060, the Commission approved 2004-2005 energy efficiency funding levels of \$493.86 million and an additional \$15.71 million for measurement and evaluation studies of utilities programs. This total of \$509.57 million authorized for 2004-05 included funding from PGC funds collected in 2004-2005 and amounts carried over from previous years.

In D.05-09-043, the Commission approved 2006-2008 energy efficiency funding levels, and a 2006-2008 energy efficiency program budget totaling almost \$2 billion for non-EM&V activities. The total yearly amounts are shown in the following table.

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Table II
Total Non-EM&V Budgets for Years 2006-2008

IOUs	Yearly Budgets			
	2006	2007	2008	Total
PG&E	\$244,653,750	\$279,428,777	\$343,385,716	\$867,468,243
SCE	216,574,075	225,111,946	233,145,977	674,831,998
SCG	44,322,946	56,582,684	68,016,003	168,921,633
SDG&E	75,135,490	84,665,039	97,740,036	257,540,565
Total	\$580,688,267	\$645,790,453	\$742,289,740	\$1,968,762,439

In addition, a detailed breakdown of the amounts budgeted for each IOUs are summarized in the tables below.¹⁵

¹⁵ See D.05-09-043, Attachment 4.

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Table III
PG&E 2006-2008 Program Budget

PG&E Proposed Program Portfolio	Budget			
	2006	2007	2008	Total 2006-08
Programs with Reported Savings				
Mass Market	\$120,460,077	\$148,674,656	\$181,793,391	\$450,928,124
Industrial	\$ 38,789,723	\$ 40,178,257	\$ 42,872,399	\$121,840,379
Agriculture and Food Processing	\$ 13,986,001	\$ 14,861,500	\$ 18,675,630	\$ 47,523,131
Commercial (Office Buildings)	\$ 10,510,686	\$ 11,342,972	\$ 15,045,397	\$ 36,899,055
Medical	\$ 7,575,132	\$ 7,925,714	\$ 12,918,178	\$ 28,419,024
Retail	\$ 5,148,264	\$ 5,667,321	\$ 8,053,199	\$ 18,868,784
High Technology	\$ 4,870,934	\$ 5,136,153	\$ 9,330,136	\$ 19,337,223
Schools, Colleges, and Universities	\$ 4,510,204	\$ 4,448,700	\$ 9,432,966	\$ 18,391,870
Hospitality	\$ 1,581,996	\$ 1,860,632	\$ 2,532,844	\$ 5,975,472
Residential New Construction	\$ 9,944,239	\$ 11,690,504	\$ 14,411,324	\$ 36,046,067
Programs without Reported Savings				
Statewide Marketing and Information Program	\$ 8,982,794	\$ 8,982,794	\$ 8,982,794	\$ 26,948,382
Emerging Technologies	\$ 3,672,000	\$ 3,745,440	\$ 3,842,937	\$ 11,260,377
Education and Training	\$ 13,117,200	\$ 13,379,544	\$ 13,897,857	\$ 40,394,601
Codes and Standards	\$ 1,504,500	\$ 1,534,590	\$ 1,596,664	\$ 4,635,754
Total PG&E Program Budget	\$244,653,750	\$279,428,777	\$343,385,716	\$867,468,243

Table IV
SCG 2006-2008 Program Budget

SCG Program	Budget			
	2006	2007	2008	Total 2006-08
Program Reporting Energy and Demand Savings				
Multi-Family Rebate Program	\$ 2,500,000	\$ 3,000,000	\$ 4,000,000	\$ 9,500,000
Advanced Home Program	\$ 2,250,000	\$ 3,000,000	\$ 3,500,000	\$ 8,750,000
Third-Party Programs*	\$ 8,864,589	\$11,316,537	\$13,603,201	\$ 33,784,327
Education and Training Programs	\$ 1,800,000	\$ 2,300,000	\$ 2,350,000	\$ 6,450,000
Express Energy Efficiency Rebate Program	\$ 5,308,050	\$ 7,678,996	\$ 9,114,191	\$ 22,101,237
Local Business Energy Efficiency Program	\$ 6,137,264	\$ 9,324,108	\$11,385,568	\$ 26,846,940
Home Efficiency Rebate Program	\$ 4,500,000	\$ 6,000,000	\$ 9,000,000	\$ 19,500,000
Savings By Design SCG SCE Program	\$ 1,500,000	\$ 2,500,000	\$ 3,500,000	\$ 7,500,000
Savings By Design SCG Muni Program*	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000
Sustainable Communities Demo/City of Santa Monica*	\$ 300,000	\$ 300,000	\$ 300,000	\$ 900,000
Programs without Reported Savings				
Home Energy Efficiency Survey	\$ 600,000	\$ 600,000	\$ 700,000	\$ 1,900,000
Codes and Standards Program	\$ 300,000	\$ 300,000	\$ 300,000	\$ 900,000
Energy Efficiency Delivery Channel Innovation Program*	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000
Emerging Tech Program	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000
Statewide Marketing and Outreach*	\$ 2,013,043	\$ 2,013,043	\$ 2,013,043	\$ 6,039,129
On-Bill Financing for Energy Efficiency Equipment*	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 3,750,000
Partnership Programs	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 12,000,000
Total SCG Program Budget	\$44,322,946	\$56,582,684	\$68,016,003	\$168,921,633

* New Programs for 2006-2008

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Table V
SDG&E 2006-2008 Program Budget

SDG&E Program	Budget			
	2006	2007	2008	Total 2006-08
Programs without Reported Savings				
Codes and Standards Program	\$ 400,000	\$ 400,000	\$ 400,000	\$ 1,200,000
Emerging Tech Program	\$ 1,363,000	\$ 1,363,000	\$ 1,363,000	\$ 4,089,000
Statewide Marketing and Outreach*	\$ 2,794,410	\$ 2,794,410	\$ 2,794,410	\$ 8,383,230
On-Bill Financing for Energy Efficiency Equipment*	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 3,750,000
Residential Customer Education & Information*	\$ 791,308	\$ 724,900	\$ 682,000	\$ 2,198,208
Partnership Programs				
IOUs/Community College Partnership*	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 6,000,000
CA Department of Corrections Partnership*	\$ 400,000	\$ 400,000	\$ 400,000	\$ 1,200,000
IOUs/UC/CSU Partnership	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 6,000,000
City of Chula Vista Partnership*	\$ 731,075	\$ 731,075	\$ 731,075	\$ 2,193,225
City of San Diego Partnership*	\$ 920,000	\$ 981,884	\$ 981,884	\$ 2,883,768
SDREO Energy Resource Center Partnership*	\$ 1,353,297	\$ 1,352,212	\$ 1,426,072	\$ 4,131,581
County of San Diego Partnership*	\$ 314,000	\$ 330,000	\$ 345,000	\$ 989,000
San Diego Water Authority Partnership*	\$ 725,000	\$ 704,000	\$ 708,000	\$ 2,137,000
Programs Reporting Energy and Demand Savings				
Savings By Design	\$ 3,323,540	\$ 4,225,467	\$ 6,050,932	\$ 13,599,939
Energy Savings Bid	\$11,733,071	\$16,367,338	\$22,842,880	\$ 50,943,289
Express Energy Efficiency Rebate Program	\$ 3,082,498	\$ 3,313,685	\$ 3,562,212	\$ 9,958,395
Small Business Super Saver	\$ 9,579,085	\$10,297,516	\$11,069,830	\$ 30,946,431
Standards Performance Program	\$ 3,382,612	\$ 3,636,308	\$ 3,909,031	\$ 10,927,951
Third Party Programs*	\$15,027,098	\$16,933,008	\$19,548,007	\$ 51,508,113
Upstream Lighting Program	\$ 5,144,767	\$ 5,625,425	\$ 6,107,671	\$ 16,877,863
Advanced Home Program*	\$ 2,213,250	\$ 2,213,250	\$ 2,213,250	\$ 6,639,750
Sustainable Communities Program	\$ 394,909	\$ 573,936	\$ 725,985	\$ 1,694,830
Lighting Exchange and Education	\$ 500,000	\$ 516,730	\$ 533,600	\$ 1,550,330
Limited Income Refrigerator Replacement	\$ 1,090,520	\$ 1,090,520	\$ 1,090,520	\$ 3,271,560
Multi-Family Rebate Program	\$ 2,155,159	\$ 2,258,557	\$ 2,364,428	\$ 6,778,144
Single Family Rebate Program	\$ 2,466,891	\$ 2,581,818	\$ 2,640,249	\$ 7,688,958
Total SDG&E Program Budget	\$75,135,490	\$84,665,039	\$97,740,036	\$257,540,565

* New Programs for 2006-2008

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Table VI
SCE 2006-2008 Program Budget

SCE Programs	Budget			
	2006	2007	2008	Total 2006-08
Programs Reporting Energy and Demand Savings				
Appliance Recycling	\$ 12,301,351	\$ 13,291,900	\$ 14,292,700	\$ 39,885,951
Residential EE Rebates	\$ 21,096,248	\$ 22,698,565	\$ 23,506,844	\$ 67,301,657
Multifamily Rebates	\$ 17,819,229	\$ 17,651,334	\$ 17,694,803	\$ 53,165,366
Home Energy Efficiency Surveys	\$ 2,318,380	\$ 1,818,100	\$ 1,828,800	\$ 5,965,280
Integrated Schools	\$ 1,544,858	\$ 1,638,300	\$ 1,805,000	\$ 4,988,158
CA New Homes	\$ 6,021,673	\$ 6,125,343	\$ 6,185,143	\$ 18,332,159
Comprehensive HVAC - Residential	\$ 4,471,302	\$ 4,471,302	\$ 4,471,302	\$ 13,413,906
Comprehensive HVAC - Non-Residential	\$ 15,744,580	\$ 15,744,580	\$ 15,744,580	\$ 47,233,740
Retrocommissioning	\$ 1,548,850	\$ 5,107,850	\$ 5,099,350	\$ 11,756,050
Industrial Processes	\$ 13,271,370	\$ 13,127,530	\$ 14,136,215	\$ 40,535,115
Agriculture Energy Efficiency	\$ 10,133,550	\$ 11,515,264	\$ 16,414,020	\$ 38,062,834
Small Business Direct Install	\$ 16,133,486	\$ 16,133,486	\$ 16,133,486	\$ 48,400,458
Savings By Design	\$ 8,618,503	\$ 10,327,770	\$ 11,986,498	\$ 30,932,771
Sustainable Communities	\$ 1,331,060	\$ 1,418,185	\$ 1,679,905	\$ 4,429,150
Business Incentive Program	\$ 36,243,641	\$ 35,868,746	\$ 33,810,917	\$105,923,304
Partnerships	\$ 14,830,350	\$ 14,830,350	\$ 14,830,350	\$ 44,491,050
IDEEA	\$ 10,887,353	\$ 10,887,353	\$ 10,887,353	\$ 32,662,059
InDEE	\$ 1,926,953	\$ 1,926,953	\$ 1,926,953	\$ 5,780,859
Programs without Reported Savings				
Flex Your Power/Marketing Outreach	\$ 6,737,838	\$ 6,737,838	\$ 6,737,838	\$ 20,213,514
Education Training and Outreach	\$ 8,025,500	\$ 8,025,500	\$ 8,025,500	\$ 24,076,500
Emerging Technologies	\$ 3,729,000	\$ 3,794,000	\$ 3,907,240	\$ 11,430,240
Codes and Standards Advocacy	\$ 1,839,000	\$ 1,971,697	\$ 2,041,180	\$ 5,851,877
Total SCE Program Budget	\$216,574,075	\$225,111,946	\$233,145,977	\$674,831,998

The Commission, in D.05-11-011, approved an overall funding level of \$162,794,829 for EM&V activities for the 2006-2008 program cycle, which represents approximately 7.6% of the total energy efficiency budgets authorized in D.05-09-043 and D.05-11-011.¹⁶ A detailed breakdown of the approved funding levels for EM&V is provided in the table below.

¹⁶ \$1,968,762,439 in program budgets authorized in D.05-09-043 plus \$162,794,829 for EM&V authorized in D.05-11-011 equal a total amount of \$2,131,557,268 authorized for energy efficiency for program years 2006-2008. \$162,794,829/\$2,131,557,268 = 7.6%.

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Table VII
EM&V Budget for 2006-2008 Program Cycle

EM&V Planned	BUDGET			
	2006	2007	2008	2006-2008
Joint Staff Managed Projects				
EM&V Management, Quality, Assurance, and Implementation Support	\$6,917,887	\$6,085,387	\$6,790,387	\$19,793,661
Program and Portfolio Evaluation Studies	\$18,570,000	\$26,755,000	\$42,125,000	\$87,450,000
Overarching and Policy Support Studies	\$2,745,000	\$4,912,500	\$3,127,500	\$10,785,000
Subtotal:	\$28,232,887	\$37,752,887	\$52,042,887	\$118,028,661
IOUs-Managed Evaluation Projects				
PG&E				\$20,593,000
SCE				\$14,846,000
SDG&E				\$5,665,892
SCG				\$3,661,276
Subtotal:				\$44,766,168
Total EM&V Budget:				\$162,794,829

With the inclusion of EM&V, the total budget for energy efficiency programs for the four utilities' 2006-2008 three-year program cycle is \$2,131,557,268.

Fund Shifting

In 2005, the Commission's Office of Ratepayer Advocates (ORA) proposed fund shifting rules be added to the energy efficiency administrative structure adopted by the Commission in D.05-01-055. ORA's proposal included specific fund shifting rules that would define how much flexibility the IOUs should have to shift funds from one energy efficiency program to another during the 2006-2008 program cycle. In D.05-04-051, the Commission ordered that the IOUs and advisory groups develop fund shifting rules for the Commission's consideration and that the IOU submit them for review when filing their 2006-2008 program plans.

In D.05-09-043, the Commission adopted fund shifting guidelines that allow the IOUs the flexibility to shift approved program funds among all programs within the same category, across program categories, carry over or carry forward funds from one program year to the next, as well as to discontinue underperforming programs or add new programs within the 2006-2008 program cycle and beyond. In this decision, the Commission presented its fund shifting rules in Attachment 3, Table 8. In addition, the Commission ordered that Table 8 be appended to Appendix A of the Energy Efficiency Policy Manual (Version 3), adopted by the Commission in D.05-04-051.

Reporting Requirements

Historically, the Commission ordered utilities to report on their demand-side management activities using a Reporting Requirements Manual (RRM), approved by the

Commission. This manual was initially prepared by Commission staff, in conjunction with the utilities and staff from the CEC and was updated or revised over the years on an as needed basis.

For reporting on program years 2006 and beyond, the Commission initiated a process to develop new reporting requirements.¹⁷ Preliminary monthly and quarterly reporting requirements for portfolio monitoring were approved in the ALJ's Ruling on Reporting Requirements, dated February 21, 2006. In her ruling, the ALJ described that portfolio monitoring (also referred to as Regulatory Reporting Requirements) are essentially standardized status reports that program administrators, and in turn program implementers, are required to provide on program expenditures, activities, energy savings/demand reduction achievements and other program-related information. The Portfolio Reporting Requirements were presented in the Attachment to the ruling.

The ALJ pointed out that the portfolio management reporting requirements content and format will need to be modified over time, particularly in the first year and that the annual reporting requirements information, yet to be adopted, should be accumulated through the monthly and quarterly reporting requirements.

The type of data and information required to be reported on a monthly basis includes EE program cost and impact data, program changes/new program information, and portfolio summary of costs and impacts. The type of information required to be reported on a quarterly basis includes portfolio benefit/costs metrics (cumulative to date), measure list for each EE program, expenditures by allowable cost categories, achievements towards the Green Building Initiative goals, and program narratives for each program describing program activities during the quarter.

In the February 21st ruling, the ALJ directed the staff from the Energy Division and the CEC (Joint Staff) and their consultant to further revise the EM&V Draft Protocols. These EM&V Protocols are used by evaluators to conduct their evaluation studies.

Lastly, in her February 21, 2006 ruling, she ordered that the utilities and implementers continue to use the listing of allowable costs developed by the Energy Division to ensure that the expenditures are properly allocated and reported. This list was attached to the ruling.

Annual reporting requirements for energy efficiency, including report structure, content and filing requirements, were adopted in the ALJ's Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues, dated August 8, 2007. These requirements are contained in the RRM and spreadsheet template posted at <http://www.cpuc.ca.gov/PUC/energy/electric/Energy+Efficiency/Programs/> under "Reporting Rules."

¹⁷ Assigned Commissioners' Ruling Soliciting Comments on Reporting Requirements, in R.01-08-028, dated December 6, 2005.

The annual reports are due each year on May 1, with the exception of the report on 2006 which the ALJ ordered to be filed by October 31, 2007. Among the requirements to be included in the Annual Reports of the IOU's include energy savings, emissions reductions, expenditures, cost effectiveness, bill payer impacts, Green Building Initiative goals, shareholder incentives, and savings by end-use, and commitments.

In order to assist the Energy Division in fulfilling its responsibilities in monitoring and evaluating the energy efficiency programs, the Commission authorized the expenditure of PGC funds for the creation of a data management system known as the Energy Efficiency Groupware Application (EEGA).¹⁸ The purpose of this system is to ensure energy efficiency reporting is organized, accurate, consistent and useful to the public, the Commission and others are charged with ensuring that California's energy needs are met.¹⁹ The Commission maintains this website for posting the monthly, quarterly and annual energy efficiency reports at <http://eega2006.cpuc.ca.gov>. In addition, the utilities post their energy efficiency program plans and Energy Division posts summary information on the energy efficiency programs on this website.

Audit of Energy Efficiency Ordered By Commission

In D.05-01-055, the Commission, among other things, described its overall quality assurance and policy oversight responsibilities with respect to the energy efficiency programs, including that it would perform a number of functions to ensure that program results are accurate and that ratepayer funds are being spent and managed in a responsible and productive manner.²⁰ The Commission explained that one of the tools it may use for this purpose is an audit of the administrators and their program implementers, conducted by Commission staff, or by consultants under contract with the Commission. The Commission indicated that it will determine and prescribe what action is to be taken by the IOUs in response to the audit findings and recommendations. Further, the Commission noted that it may establish the frequency of these audits as part of the 2006 program planning process, by Assigned Commissioner's ruling, or by other means as appropriate.

In D.05-11-011, the Commission, among other things, approved a Joint Staff Request for EM&V Budget Authorization and EM&V Fund Shifting Authority, submitted by staff from the Commission and the CEC.²¹ That filing, approved by the Commission, included a provision of \$3.5 million for financial and management audits of program years 2006-2008, to assist the Commission in ensuring that ratepayer funds are satisfactorily accounted for and spent for their intended purposes.²²

¹⁸ See D.05-01-055, page 123.

¹⁹ *Ibid*

²⁰ See D.05-01-055, pages 130-131 and Ordering Paragraph 15.

²¹ See D.05-11-011, Ordering Paragraph 1 and Attachment 3 of that decision.

²² *Ibid.*, Attachment 3, pp 5 and 15.

In the ALJ's Ruling on Reporting Requirements, dated February 21, 2006, the ALJ ordered that program administrators/ the utilities and program implementers should use the listing of allowable costs, and associated definitions, in the RRM to ensure they allocate and report expenditures properly.²³ The ALJ in this ruling indicated that the financial audits ordered in D.05-11-011 should verify that energy efficiency expenditures are being properly booked to accounts and accurately reported.²⁴

In early 2007, the Commission's Energy Division requested that the UAFCB perform these audits, with the UAFCB submitting its audit report each year on August 1, on the previous year's program.

In July, 2008, the UAFCB requested a 60-day extension to submit its audit report on program year 2007. On July 8, 2008, the Commission's Executive Director approved the UAFCB's 60-day extension request to submit its audit report on program year 2007 on October 1, 2008.

IV. Audit Scope

The audit by the UAFCB focused on reviewing energy efficiency expenditures and covered the period from January 1, 2007 to December 31, 2007.

Examination of the energy efficiency expenditures included the areas of:

- Program Accounting and Reporting
- Program Processes and Controls
- Program Implementation and Costing
- Program Oversight

The UAFCB did not review the EM&V or share-holder incentives processes.

The UAFCB selected five (5) of the fourteen EE markets, totaling \$241 million and representing 81.70% of total 2007 EE expenditures of 298 million. The five markets examined are:

- Mass Markets.
- Schools
- Office
- Agricultural and Food Processing
- High Tech

In addition, the UAFCB followed up on its prior findings and recommendations from its audit report on program year 2006, to ascertain that PG&E had implemented the

²³ See February 21, 2006 ALJ Ruling, page 11 and Ruling Paragraph #5.

²⁴ Ibid., page 11.

UAFCB's recommendations²⁵ as promised by PG&E in its response to the 2006 final audit report.

V. Objectives and Goals

The objectives of UAFCB audit were to: (1) ascertain that expenditures were properly charged against 2007 program funds and (2) ascertain that the expenditures were properly reported. To accomplish the audit objectives, UAFCB staff organized the audit into four areas, with the following audit goals:

1. Program Accounting and Reporting
 - Obtain an understanding of PG&E's accounting systems and policies related to the energy efficiency programs and examine how program expenditures are tracked;
 - Ascertain with reasonable assurance that program expenses are properly recorded and reported; and
2. Program Processes and Controls
 - Determine that policies and procedures of PG&E for ensuring energy efficiency charges are well supported and documented with respect to customer enrollment, measure installations and costs, financial incentive payments and inspection procedures; and
 - Examine and document that the processes for the administration of the energy efficiency programs of PG&E are properly functioning as designed.
3. Program Implementation and Costing
 - Determine that the energy efficiency programs are properly implemented in compliance with policies and procedures described in the PU Code (Sections 381 and 890) and Commission Decisions (D.05-01-055 and D.05-09-043);
 - Determine that PG&E has adequate processes in place for the administration of contracts between the company and contractors; and
 - Test on a sample basis the reasonableness of recorded expenses.
4. Program Oversight
 - Determine if PG&E has an effective program oversight and monitoring process in place.

²⁵ See UAFCB's report entitled "Financial & Management Audit of Pacific Gas and Electric Company U-39-E Energy Efficiency Public Programs for the Year Ended December 31, 2006," dated July 27, 2007.

VI. Audit Standards and Procedures

Auditing Standards Applied

The UAFCB audit was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) and accordingly, included examining, on a test basis, evidence about PG&E's compliance with Commission directives and performing such other procedures as considered necessary in the circumstances.

Auditing Procedures Applied

The UAFCB performed the following procedures:

Pre-audit Procedures

- Familiarized selves with the utility's energy efficiency programs; i.e., types of programs, program processes and operations.
- Reviewed pertinent Commission decisions, resolutions and applicable rules and regulations.
- Reviewed prior audit reports and working papers for current audit planning purposes and discussed prior findings and recommendations with the previous audit members.
- Contacted utility regulatory personnel to set up current audit logistics and protocols.

Energy Efficiency Program Processes Review

- Interviewed utility program personnel to gain information and understanding of the utility's energy efficiency programs operations and processes, e.g. customer enrollment, program administration and management oversight.
- Reviewed utility program policy and process manuals for compliance with regulatory directives and decisions.
- Conducted on-site visits to energy efficiency program centers to observe program operations and test for compliance with program policies and objectives.
- Compared actual expenditures to budget program data for variances and analyzed such variances for reasonableness and allowances.

Energy Efficiency Revenue and Expenditures

- Reviewed utility accounting manual and procedures on the proper recording of program revenue and expenditures.
- Evaluated utility internal control procedures on revenue and expenditures for effectiveness and deficiencies; implemented additional audit procedures to assess and resolve any deficiencies.

- Verified program revenue and expenditures, on a sample basis, to supporting documents and sources to determine accuracy and reasonableness.
- Reviewed the utility's competitive bidding process and examined sample contracts for program compliance.
- Reconciled program databases to general ledger systems.
- Formulated audit findings, conclusions and recommendations.
- Provided appropriate audit opinion upon completion of engagement.

VII. Audit Findings

1. Program Accounting and Reporting:

Audit Goal: Obtain an understanding of PG&E's accounting system and procedures related to the energy efficiency programs; ascertain with reasonable assurance that revenues and expenses are properly recorded and reported; and assess PG&E's internal controls for reviewing and assessing its energy efficiency programs.

Auditor Conclusion: For program year 2007, PG&E had adequate controls in place respecting its accounting system and procedures to ensure that energy efficiency program revenues and expenses were properly recorded and reported to the Commission.

Auditor Recommendation: A detailed and thorough review of the basis for costs that are custom allocated and the basis for the calculation of Provider Cost Center (PCC) hourly rates should be performed in the next UAFCB's energy efficiency audit.

Accounting and Reporting Systems:

PG&E uses the System Applications and Products in Data Processing (SAP) as its financial reporting system or General Ledger. PG&E's energy efficiency costs are tracked in SAP through Internal Orders Numbers (IO) created specifically for these programs. Administrative costs and overhead charges from various support centers, which are custom allocated, are also recorded in SAP with one of the program's IO.

PG&E is using an additional database system to manage their energy efficiency programs, the Marketing Decision Support System (MDSS). MDSS is used for tracking all customer and project direct cost information, such as rebates, incentives, installations, and inspections, as well as program budgets. Program costs recorded in SAP and MDSS are reconciled monthly and reported to the Commission in the monthly and quarterly energy efficiency reports.

The UAFCB reviewed PG&E's 2007 reconciliations between energy efficiency SAP and MDSS and found no exceptions. It also reviewed, on a sample basis,

PG&E's 2007 energy efficiency expenditures, by program and cost categories, using the information recorded in PG&E's SAP system.

Expenses:

For program year 2007, PG&E reported total energy efficiency program expenditures of \$298 million, net of benefit burdens, consisting of \$287 million in direct charges and \$11 million in custom allocation expenses (allocated indirect overhead costs).²⁶ Direct charges include all costs directly traceable to the program and time-based directly-assignable overheads, using PG&E's Provider Cost Center (PCC) rates.

PCC's are individual groups or departments performing work in the PG&E organization. All these support groups charge a standard hourly rate to energy efficiency programs for services provided by any employee in each group. The rates charged differ from one PCC to another, are developed annually based on the PCC total expenses divided by that PCC's estimated billable hours and are reviewed periodically for possible adjustment during the year. Total costs incurred by the PCC and used in the calculation of the charge rates include, among other things, material and labor.

Costs incurred for the overall support of administering energy efficiency programs, but not directly related to the support of a specific energy efficiency program, are allocated via PG&E's "custom allocation process." The overall support costs are charged to "Source Orders" during the month to be allocated to all "Targeted Orders." Source order numbers identify the type of support to be allocated. Target order numbers identify the type of energy efficiency program and expense. Support costs charged to "source" orders based on the type of support are allocated to "target" orders based on the type of costs (e.g. labor, contracts, incentives, and total order costs) charged to the source order in that given month. In 2007, the indirect costs charged to the Program Year 06-08 program orders were from seven general categories: Information Technology; Regulatory, Reporting; Outreach; Product Development; Administration and Variances.

The UAFCB reviewed cost information for three energy efficiency PCC, as well as PG&E's spreadsheets detailing the custom allocated charges. Due to time constraints, it was not able to test the information in PG&E's spreadsheets. Consequently, it recommends a thorough review of allocated expenses and PCC charge rates during the coming audit of the 2008 energy efficiency programs.

The UAFCB reviewed PG&E's reconciliation of program expenses recorded in SAP, MDSS, and the energy efficiency balancing accounts with total energy

²⁶ Benefit burdens include employee payroll taxes and benefits that are recovered in a General Rate Case. For 2007 PG&E reported a benefit burden of \$5,987,834.

efficiency costs reported to the Commission (the reconciling items being the benefits burden and the allocated indirect overhead charges) and found no exceptions.

The UAFCB also found, as part of its review of the balancing accounts, that the amount of interest PG&E applied is in compliance with its Preliminary Statements filed with the Commission.

Revenues:

The energy efficiency revenues are recorded in two-way balancing accounts, which allow PG&E to recover revenue if collections are below the authorized budgets and allow for ratepayers to be reimbursed if collections are over the authorized budgets through a revenue rate adjustment. These accounts are reviewed in the annual electric true-up (AET) and the PPP gas surcharge advice letters to confirm if there is an over-collection or under-collection from customers. The UAFCB did not perform any testing of the energy efficiency program revenues, at this time.

2. Program Processes and Controls:

Audit Goal: Determine if PG&E's energy efficiency policies and procedures for customer enrollment, measure installations and costs, financial incentive payments and inspection procedures are well supported and documented.

Auditor conclusion: The UAFCB did not find any major reportable deficiencies or concern with PG&E's processes and written procedures in place for the delivery and monitoring of its 2007 energy efficiency programs respecting the processes indicated above.

For the 2006-2008 program years, PG&E offers various energy efficiency incentive programs aimed at its Mass Market and Targeted Market customers.

The UAFCB identified and reviewed the written processes and procedures associated with the delivery of PG&E's Mass Market and Targeted Market energy efficiency services/products and programs:

(1) Mass Market rebates: PG&E offers rebates/incentives for single-family homes, small business and multifamily properties. Rebates and incentives are given for the purchase or installation of a wide range of products or improvements, depending on what the customer qualifies for. One application is used, where the customer identifies the type of program; i.e. home, small business or multifamily, and completes the application accordingly.

(2) Nonresidential Retrofit-Demand Response (NRR-DR): This program provides financial incentives for the installation of new high-efficiency equipment or systems. A project may consist of the retrofit of existing equipment/systems associated with the same or increased load. Businesses that install energy savings equipment are rewarded with cash payments based on the actual annual kWh or therm savings achieved. Incentives are paid on the energy savings above and beyond minimum federal and state-mandated energy efficiency performance.

(3) Nonresidential New Construction (NRNC-Savings by Design): NRNC, formerly known as Savings by Design, is a renovation/remodel energy efficiency offering. NRNC encourages energy efficient building design and construction practices, promoting the efficient use of energy by offering up-front design assistance, supported by financial incentives based on project performance.

(4) Targeted Market-Retro-commissioning: This program offers financial and technical assistance for building owners to undertake retro-commissioning projects and implement measures that improve their building's operations. This program is offered to commercial, institutional, and municipal customers and funded through 2008.

PG&E's Targeted Market customers who elect to participate in PG&E's 2006-2008 energy efficiency programs are processed using the procedures laid out for the three program/projects (2), (3) and (4), as described above. Those procedures are clearly defined and generally include the following steps:

- Description of project team roles.
- Determination of Customer Eligibility.
- Customer Enrollment.
- Determining Rebate/Incentives.
- Measure Installation.
- Field Verifications (Pre and Post).
- Incentive Payment Approval.
- Incentive Dispute Process.
- Additional Requirements for Third-Party Implementers.

Based on its review of PG&E's written policies and procedures for the four program processes, the UAFCB did not find any major control weaknesses. The UAFCB's testing and assessment on how effective the implementation of these processes is reported in the following section entitled "Program Implementation and Costing."

3. Program Implementation and Costing:

Audit Goal No. 1: Determine that the energy efficiency programs are properly implemented in compliance with PG&E's policies and procedures as related to the Commission's guidelines and PU Code.

Auditor Conclusion: PG&E had adequate arrangements for the delivery of energy efficiency services/products during 2007 program year.

PG&E developed a "Market Integrated Demand Side Management" (IDSM) portfolio, which organizes program offerings and strategies around the Mass Market and Targeted Market segments.

Mass Market: As described above, PG&E's Mass Market Program is designed to provide a menu of readily available energy efficiency measures with fixed-rebate levels which are intended to result in clear energy savings. The Mass Market Program is comprised of single-family residential retrofit, multifamily residential retrofit, commercial and residential renters and small commercial customers. For some measures, the customer purchases and installs the measure, then submits the rebate application often on-line through "E-rebates" or obtains a "point of purchase" rebate at the store where the measure was purchased. Other energy efficiency measures are made available through contractors trained on quality installation and maintenance to maximize the equipment savings.

PG&E uses written procedures to guide its staff in correctly coordinating customer information, providing vendor/retailer/contractor support and encouraging manufacturer/distributor or upstream market participation.

Vendors and contractors continue to be a key delivery channel for PG&E's Mass Market Program, particularly for the Express Efficiency Program. PG&E uses Local Government Partnership Programs (LGP) to leverage the use of vendors and contractors by providing them with incentives to perform direct installations for small commercial and/or residential customers. Currently, twenty one LGP are approved by the Commission. The majority of these LGP are using direct install as the primary delivery channel and are providing the outreach and marketing to localized portions of the Mass Market Program customers.

PG&E provides education for distributors and contractors through classes, work shops and demonstrations. PG&E educates customers through a variety of marketing and promotional materials, including the PG&E Web site along with demonstrations and promotions at public events. Tools such as surveys and audits are employed to determine and monitor customer participation and satisfaction. PG&E has written policies and procedures to direct its staff in carrying out these duties.

Targeted Markets: PG&E's programs for the Targeted Markets involve examining existing facilities and/or expansion plans (new construction or retrofit) and developing improvements that best address deficiencies while maximizing energy savings. PG&E's Targeted Market Program includes the following programs:

- Agricultural and Food Processing, which includes food processors, wineries, dairies, greenhouses and refrigerated warehouses;
- Schools, Colleges and Universities, which includes K-12 schools, community colleges, universities and campus housing;
- Retail, which includes general retail, big box retail, supermarkets, restaurants and food services;
- Industrial, which includes fabrication industries, process industries (including waste water and water treatment) and heavy industrial manufacturing;
- Medical, which includes hospitals, assisted living facilities, skilled nursing facilities and medical specialty facilities;
- Commercial, which includes office buildings, governmental facilities and large institutional facilities;
- Hospitality Facilities, which includes lodging, resort, and hotel facilities;
- High Technology, which includes laboratories, clean rooms, and data centers; and
- Residential New Construction, which targets market actors involved in residential construction.

PG&E also uses third-party contractors as a delivery channel to implement energy efficiency programs for its Targeted Market customers. Under the oversight of the Program Manager, third-party contractors provide marketing for the energy efficiency program offerings; enroll customers and pay the financial incentives. The specifics of the contracts between the third-party implementers and PG&E vary.

To address the audit objective above, the UAFCB reviewed ten third-party contracts: (1) Integrated Resources; (2) VCCT, Inc.; (3) Air Power USA Inc.; (4) Global Partners; (5) California State University (CSU) Fresno Foundation; (6) ABAG; (7) Enovity Inc.; (8) Newcomb Anderson McCormick (NAM); (9) Emcor Energy Services; and (10) Portland Energy Conservation, Inc. It found that the contract amounts, tasks, deliverables and payment terms are clearly outlined in each contract. The roles of PG&E and the third parties are also clearly defined. The UAFCB did not find any exceptions in this area.

Audit Goal No. 2: Test PG&E's processes for their effective implementation and review the reasonableness of reported expenses.

Auditor Conclusion: In general, PG&E in general sufficiently implemented its 2007 energy efficiency programs except for: (1) lack of supervisor approval for some employee time sheets used in the assignment of direct overhead; and (2) the potential exists for the misreporting of energy savings data.

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For the Year Ended December 31, 2007
(October 1, 2008)

The UAFCB chose five programs to draw its samples from for examination and testing. The expenditures for these five programs totaled \$198.2 million, representing 67% of PG&E's 2007 total energy efficiency expenditures, not including EM&V:

- Mass Markets;
- Agricultural and Food Processing;
- Schools, Colleges and Universities;
- Commercial office buildings; and
- High Tech.

From the programs, the UAFCB selected 508 transactions for testing and analysis. The UAFCB selected 162 transactions from Mass Markets and 346 transactions from the four Targeted Market Programs. Its intent was to assess how effective PG&E's implementation of the programs' internal controls and the reasonableness of the expenses that PG&E reported to the Commission.

The UAFCB selected its samples from each market segment were selected from the following cost categories: (1) Administration; (2) Implementation; (3) Marketing; and (4) Incentives. The UAFCB's review included, but was not limited to: reviewing invoices for accuracy; appropriate Purchase Order Number (PO) and payment approval; documentation to support labor costs; employee time sheets for accuracy of hours and supervisor approval; customer applications for eligibility with program manager's approval; reports on and approval of estimated incentives; completion of incentive contract agreements; compliance with pre- and post-inspection requirements; calculation and approval of rebate/incentives prior to payment; and the completion of the Integrated Processing Center Compliance Check List (IPC) required to be completed prior to the issuance of the checks.

The UAFCB noted the following issues:

1. Lack of supervisor approval on time sheets

PG&E charges direct overhead to the energy efficiency programs based on the actual time spent on these programs by its employees. 117 items from the 508 samples selected for our review were expenses of this nature.

The UAFCB reviewed the 117 employee time sheets provided by PG&E to support these direct overhead charges and found that 23 of them have no written or electronic supervisor approval. This lack of proper timesheet approval was also noted as an exception in the 2006 energy efficiency audit report issued by the UAFCB on August 1, 2007. .

2. Incorrect recording and reporting of energy savings

The UAFCB tested 116 rebate/incentives out of the total 508 samples selected. Of the 116 transactions tested, UAFCB noted the following exceptions:

For the Fabrication Process/Heavy Industry, Sample No. 24, the final post-inspection report for Project #56466 indicated the energy savings to be 159,938 therms (actual) based on the estimate of PG&E's consultant, with a resulting incentive recommended payment of \$55,391. However, as a result of negotiations with the customer, PG&E paid the customer an incentive of \$295,575 based on an energy savings amount of 369,469 therms. The UAFCB still does not understand the reasons for the huge difference between the savings calculations of its hired consultant and the basis for the incentive payment. The lack of industry standards is a convenient way of explaining the problem away.

The energy savings PG&E reported to the Commission in this case are the amounts resulting from the negotiated 369,469 therms, not the actual savings, potentially distorting the total resource cost (TRC) and program administrator cost (PAC) tests of cost-effectiveness.

4. Program Oversight:

Audit Goal: Determine if PG&E has an effective program oversight and monitoring process in place.

Auditor conclusion: The UAFCB did not find major oversight weaknesses related to PG&E's monitoring of its 2007 program implementation, costs, energy savings goals, and third-party contracts.

As described earlier, MDSS is PG&E's primary energy efficiency program tracking system. MDSS tracks program participation, provides rebate check information for customers and vendors, and provides data on energy savings. Among other MDSS database and web and non-web application systems used for the energy efficiency programs, four primary systems that are used by PG&E to implement and closely monitor energy efficiency programs are described below.

The **Customer Energy Efficiency (CEE) Tracker Application** serves as a report writer and user interface with MDSS providing accurate, easily accessible, up-to-date information about the programs, on a program-by-program basis. CEE allows the extraction and summarization of detailed data, including goals, expenditures, savings and incentives and gives program managers the tools to track actual achievements and expenses against goals and budgets.

The **Apptrack Application** provides an up-to-date status on any application submitted for any rebate/incentive program. It provides all historical activities

that have transpired from the time an application is first received to when it is paid, rejected or withdrawn.

The **Check Processing System (CPS)** provides for authorized users to approve, cancel, and re-issue rebate/incentive checks. It also creates reports of check/payment information by batch, application, check numbers and customer names.

Swapdrive is a third-party vendor, who is used for transferring files back and forth between third-party implementers and MDSS. Data can be transferred in various formats, i.e., Word documents, PDFs, or databases such as Access or Excel. Swapdrive requires the use of secured protocols to transfer to or receive data from outside parties. Third-party implementers are required to sign a Non Disclosure Agreement with PG&E and provide an encryption password before they can download data.

PG&E's Program Managers are responsible for the overall oversight of the energy efficiency programs. PG&E's Program Managers use all the management reporting tools listed above to provide oversight.

In particular, PG&E's Program Managers have a duty to ensure compliance with contract terms, monitor dollar amounts, authorize invoices for payment and resolve any problems or issues, with respect to third-party contractors. PG&E can use third-party contractors to implement programs, who may provide marketing and administrative services, customer enrollment and the payment of customer incentives. The specifics of the contracts between the third-party implementers and PG&E vary and the contract amount, task, deliverables and payment terms are outlined in each contract that the UAFCB reviewed.

The UAFCB tested the program's oversight of third-party contractors by verifying the processes for approving invoices, and verifying the use of monthly reports by Program Managers to monitor budgets and program accomplishments, on the two following contracts: Global Partners and California State University Fresno Foundation. UAFCB did not find any exceptions.

5. Other Matters

Prior Year Audit:

Based on UAFCB's examination of PG&E's 2006 energy efficiency program, the UAFCB concluded that PG&E's Internal Audit Department's (IA) reviews of the energy efficiency programs were not comprehensive enough. In its audit report, the UAFCB recommended that future audits be conducted by IA to address program contracts, customer revenues collected for energy efficiency programs, balancing accounts, and expenditures such as administrative costs, cost allocations, and overhead costs.

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In response to the UAFCB's prior year findings and recommendations, PG&E IA is scheduling reviews of the energy efficiency programs starting in the third quarter of 2008 for program years 2006-2007 and in the third quarter of 2009 for program year 2008. PG&E indicates that these examinations will focus on auditing contracts, customer revenues, and program expenses including: administration costs, allocated direct and indirect overhead costs and balancing account entries. PG&E's IA Department has provided an adequate schedule and audit program to review the controls and procedures of PG&E's 2006-2008 energy efficiency programs.

Internal Controls:

The UAFCB limited its review of PG&E's internal controls to: (1) following-up on its 2006 audit findings specifically with regards to PG&E's planned energy efficiency internal operational audits and (2) reviewing PG&E's most recent energy efficiency related internal audit report.

Review Of PG&E's Internal Audit Report:

The UAFCB reviewed PG&E's IA's report dated August 1, 2007, disclosing the results of a review completed in 2007 to assess the effectiveness of the energy efficiency's energy savings processes and controls over the calculation, approval, and verification of reported energy savings. PG&E identified three areas needing improvement: (1) the verification, documentation, and approval of non-deemed savings; (2) the management of user access to systems and data used in the savings calculation; and (3) the management of changes in the MDSS. At the end of our field work, PG&E represented to the UAFCB that the remedies to the reported weaknesses are being made and these efforts are being monitored by PG&E's IA.

VIII. Comments on the Draft Report

On September 10, 2008, the UAFCB sent a copy of its draft report to PG&E for its review and comment. Included in the copy of the draft report were draft Sections I. through VI., as well as the UAFCB's draft audit findings, as contained in Section VII. The UAFCB made changes to its draft report, as appropriate, based on comments received from the utilities or to clarify the report.

PG&E submitted its comments on September 24, 2008. Below is a brief summary of PG&E's comments. Appendix B contains PG&E's response in its entirety.

In response to the UAFCB's conclusion respecting Implementation and Costing, Audit Goal 2, PG&E acknowledged that there were timesheets that lacked supervisor approval and commented that a majority of those occurred before PG&E began requiring an electronic approval. PG&E also indicated that the remaining exceptions occurred before PG&E implemented a new company-wide escalation process, currently in place, which requires that the managers of the supervisors be notified if time remains unapproved after three months.

In response to the UAFCB's conclusion respecting Program Implementation and Costing, Audit Goal 2, PG&E asserts that it believes it acted appropriately. PG&E claims that due to the huge difference between the energy savings calculated by PG&E's consultant and PG&E's customer, PG&E re-examined the two savings estimates and came up with an estimate of energy savings between the two that it believes is reasonable. PG&E also represented that it is conducting a study of this type of installation to determine industry best practices and will use the study results to calculate estimates of energy savings from this type of installation in the future.

IX. Staff Rebuttal

The UAFCB finds that PG&E's corrective action to ensure that time is approved by supervisors is reasonable, and if the new rules are followed, they should correct the audit issue. PG&E should provide a copy of the communication to managers and supervisors of this company-wide process to the UAFCB Chief by November 1, 2008.

The UAFCB finds PG&E's explanation for the use of a different energy savings other than that of its consultant acceptable in this instance. However, PG&E should provide an estimated date for the completion of its industry study or practices to the UAFCB Chief by November 1, 2008 and a copy of the survey results as soon as they become available. The UAFCB staff also recommends that the Energy Division include this PG&E customer project in the evaluation, measure and verification study.

Appendix A

Abbreviations and Acronyms

AB	Assembly Bill
AEAP	Annual Earnings Assessment Proceeding
AICPA	American Institute of Certified Public Accountants
BOE	Board of Equalization
BTU	British Thermal Unit
CBEE	California Board of Energy Efficiency
CEC	California Energy Commission
CEE	Customer Energy Efficiency
Commission	California Public Utilities Commission
CPA	California Consumer Power and Conservation Financing Authority
CSEA	California State Employees Association
D.	Decision
EAP	Energy Action Plan
EEGA	Energy Efficiency Groupware Application Website
EM&V	Evaluation, Measurement and Verification
GAAS	Generally Accepted Auditing Standards
GRC	General Rate Cases
IOUs	Investor Owned Utilities
LIEE	Low Income Energy Efficiency Program
OIR	Order Instituting Rulemaking
OP	Ordering Paragraph

Appendix A (Continued)

OPEC	Organization of the Petroleum Exporting Countries
PG&E	Pacific Gas and Electric Company
PGC	Public Goods Charge
PPP	Public Purpose Programs Surcharge
PU Code	Public Utilities Code
R.	Order Instituting Rulemaking
RFP	Request for Proposal
Sempra	San Diego Gas & Electric and Southern California Gas
SCE	Southern California Edison
Summer Initiative	Summer of 2000 Energy Efficiency Initiative
SDG&E	San Diego Gas and Electric Company
SCG	Southern California Gas Company
UAFCB	Utility Audit, Finance and Compliance Branch



**Pacific Gas and
Electric Company**

September 24, 2008

Kayode Kajopaiye, Chief
Utility Audit, Finance and Compliance Branch
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Draft Report on PG&E 2007 Energy Efficiency Public Programs Audit

Dear Mr. Kajopaiye:

PG&E has the following comments to the draft 2007 Energy Efficiency Audit Report. We ask that these comments be incorporated into the final Audit report. We also thank the audit team: Vic Khai Duong, Helen Vaughn, Joyce de Rossett, and Christine Du for their patience and conscientious efforts to understand PG&E's programs, processes, and controls during their fieldwork.

I. Executive Summary

At p. 11, add text "the amount for gas public interest RD&D and" so that the sentence correctly reads "Generally, within 30 days of the request, a refund is receive by the utilities, less the amount for gas public interest RD&D and BOE administrative fees."

VII. Audit Findings

Section 1 – Program Accounting and Reporting

At p. 23, add text "burdens" to clarify the sentence as follows: "PG&E reported in 2007 total energy efficiency program expenditures of \$298 million (net of benefit burdens),..."

At p. 24, add text "and PPP gas surcharge advice letter" so the sentence correctly reads "These accounts are reviewed in the annual electric true-up (AET) and PPP gas surcharge advice letter to confirm if there is an over-collection or under-collection from customers."

Section 3 – Program Implementation

PG&E asks that the final Audit report be revised to reflect the following comments on these findings.

PG&E Response to CPUC Draft Audit Report - 9/24/08

Finding 1 – Lack of Supervisor approval of time sheets

On September 2, 2008, PG&E provided information regarding timesheet approvals. As described in the response in more detail, PG&E identified 31 time entries in the sample that did not have an approving signature (for purposes of this response, we considered one time entry for each day, although timesheets are processed by week). 19 of these were for time entries prior to October 2007 when supervisors were not required to electronically approve timesheets in the on-line system. There were 12 time entries that should have been electronically approved by the supervisor. We also note that there is a company-wide escalation process currently in place to ensure time is approved by supervisors and if time remains unapproved for three month, the manager of the supervisor is notified

Finding 2 – Incorrect recording and reporting of energy savings

On September 3, 2008, PG&E provided information on a customer project identified in the Draft "Financial and Management Audit of the Energy Efficiency Public Programs of Pacific Gas and Electric Company" (Audit). (See Data Response 8, question 5.)

PG&E now provides additional explanation and clarification of the incentive payment and energy savings claim for that customer project. PG&E also requests that the reference on page 28 to Sample 23 be corrected to refer to Sample 24 and that the customer's name be deleted from the Audit per the requirements for customer confidentiality.

Pipe insulation at this customer site is presently required by OSHA for safety reasons in only very limited areas within the customer site. The customer chose to achieve additional energy savings by insulating pipes in other areas to prevent heat loss. They applied to PG&E's incentive program to partially offset the added cost.

As part of the incentive application, the customer calculated the estimated energy savings (2,277,196 therms) assuming that no insulation was present (bare pipes). Since some insulation is required by OSHA in some areas, PG&E determined that this original estimate was too high because energy savings should have been calculated based only on the insulation installed in excess of the OSHA requirement.

PG&E then sent the application and estimated energy savings calculations to the consultant employed by PG&E to review these applications. The consultant provided a much lower calculation based on the assumption that all pipes had some insulation rather than bare pipes. Since all pipes did not have some insulation prior to the customer's project with PG&E, the consultant's savings estimate was artificially low (159,938 therms).

PG&E Response to CPUC Draft Audit Report - 9/24/08

At the request of the customer, PG&E re-examined the two savings estimates. As a result, PG&E determined that for this incentive application, neither of the above estimated energy savings was appropriate (i.e., the first savings estimate was too high and the second estimate was too low). In order to determine the incentive level and a more reasonable estimate of energy savings, PG&E capped the incentive at 50 percent of the incremental measure cost from the customer's invoice for this project ($\$591,150 * 50\% = \$295,575$) and backed into the energy savings from the incentive level ($\$295,575 / \$0.80 \text{ per therm} = 369,468$ therms). This method resulted in a more reasonable estimate of energy savings that was between the customer's and consultant's estimates and paid the same amount of incentive as would have resulted from the customer's higher savings estimate. The energy savings level recorded by PG&E is 1.9 million therms lower than the customer's artificially high savings estimate and 210,000 therms higher than the consultant's artificially low savings estimate.

PG&E is also conducting a study of this type of installation to determine industry best practice and confirm the reasonable savings levels. Unfortunately this study is not yet completed. In the future, similar projects will use the results of the study of industry best practice to calculate estimates for energy savings.

Please contact me if you have any questions regarding PG&E's responses.



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